

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 1-12 are pending in this application. Claims 6-12 are added by the present response. Claims 1-5 were rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. patent 5,788,747 to Horiuchi et al. (herein “Horiuchi”). Claims 1-5 were rejected under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1-12 of U.S. patent 6,773,687.

Addressing first the rejection of claims 1-5 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Horiuchi, that rejection is traversed by the present response.

Initially, applicants note independent claim 1 is amended by the present response to clarify that the mixing operation converts the impurity gas to “reaction by-products having a lower vapor pressure than that of the impurity gas”. Independent claim 1 now also recites “condensing the reaction by-products so that the condensed reaction by-products are trapped in the trap mechanism”. Those claim features are believed to be fully supported by the original specification for example at page 38, lines 14-22. Further, such features are believed to clearly distinguish over the applied to Horiuchi.

The outstanding rejection cites Horiuchi to disclose a deleterious material removing means 40. In Horiuchi an organic metal compound is burned to remove deleterious material, see for example Horiuchi at column 7, lines 48-60. Further, in Horiuchi a combustion product 146 of the burned DMAH gas falls to a bottom portion of a housing 104, which combustion products 146 can periodically be removed by periodically removing the bottom plate 110 from the housing 104.¹

¹ See Horiuchi at column 7, lines 54-67.

Thus, Horiuchi does not disclose or suggest any operation of condensing reaction by-products to be trapped in a trap mechanism. The burning operation in Horiuchi is not such a condensing.

In such ways, independent claim 1, and the claims dependent therefrom, are believed to be clearly distinguish over Horiuchi.

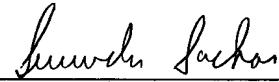
Further, with respect to new claims 6-12, those claims are also believed to distinguish over Horiuchi. More specifically, new independent claim 7, and new claims 8-12 dependent therefrom, also require the operation of condensing the reaction by-products so that the condensed reaction by-products are trapped in the trap mechanism. As discussed above, Horiuchi fails to teach or suggest such a feature. Thus, new claims 7-12 are also believed to distinguish over Horiuchi.

Addressing now the rejection of claims 1-5 under the judicially created doctrine of obviousness-type double patenting as unpatentable over claims 1-12 of U.S. patent 6,773,687, that rejection is obviated by the present response. Specifically, filed with the present response is a Terminal Disclaimer over U.S. patent 6,773,687. The submission of that Terminal Disclaimer is believed to obviate the above-noted obviousness-type double patenting rejection.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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